UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
SIDDIQI, MOHAMMAD A

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2493	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 January 2011</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
  closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>7-25 and 29</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>7-25 and 29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
    application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 17-25 and 29 are presented for the examination. Claims 1-16, 26-28 and

30 have been cancelled.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

01/25/2011 has been entered.

Claim Rejections - 35 USC § 101

3.   Claim 29 is rejected under 35 U.S.C. 101 because computer-readable medium

appears in the preamble. The United States Patent and Trademark Office (USPTO) is

obliged to give claims their broadest reasonable interpretation consistent with the

specification during proceedings before the USPTO. *See In re Zletz*, 893 F.2d 319

(Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as

broadly as their terms reasonably allow). The broadest reasonable interpretation of a

claim drawn to a computer readable medium (also called machine readable medium
and other such variations) typically covers forms of non-transitory tangible media and
transitory propagating signals *per se* in view of the ordinary and customary meaning of
computer readable media, particularly when the specification is silent. *See* MPEP
2111.01. When the broadest reasonable interpretation of a claim covers a signal *per
se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject
matter. *See In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory
embodiments are not directed to statutory subject matter) and *Interim Examination
Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101*, Aug. 24,
2009; p. 2.

The USPTO recognizes that applicants may have claims directed to computer
readable media that cover signals *per se*, which the USPTO must reject under
35 U.S.C. § 101 as covering both non-statutory subject matter and statutory subject
matter. In an effort to assist the patent community in overcoming a rejection or potential
rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests the following
approach. A claim drawn to such a computer readable medium that covers both
transitory and non-transitory embodiments may be amended to narrow the claim to
cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding
the limitation "non-transitory" to the claim. *Cf. Animals – Patentability*, 1077 *Off. Gaz.
Pat. Office* 24 (April 21, 1987) (suggesting that applicants add the limitation "non-
human" to a claim covering a multi-cellular organism to avoid a rejection under 35
U.S.C. § 101). Such an amendment would typically not raise the issue of new matter,

even when the specification is silent because the broadest reasonable interpretation

relies on the ordinary and customary meaning that includes signals *per se*. The limited

situations in which such an amendment could raise issues of new matter occur, for

example, when the specification does not support a non-transitory embodiment because

a signal *per se* is the only viable embodiment such that the amended claim is

impermissibly broadened beyond the supporting disclosure. *See*, *e.g.*, *Gentry Gallery,*

Inc. v. Berkline Corp., 134 F.3d 1473 (Fed. Cir. 1998).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 17-25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Hickson et al. (6,226,641) (Hereinafter Hickson) in view of Klein et al.

(2003/0212818) (Hereinafter Klein).

6.   As per claim 17, Hickson discloses a method that facilitates message processing,

the method performed within a computer comprising one or more processors and

computer system memory, the method comprising:

requesting one or more messages (101,102, fig 8, col 7, lines 43-53, find grouped message);

storing the one or more messages in order (col 4, lines 57-60);

determining from information associated with the one or more message that each of the one or more message belongs to a group (fig 7, col 5, lines 24-26);

linking the one or more messages by a unique group identifier (fig 7, col 5, lines 24-26, group ID consist of one or more messages);

locking the group (col 7, line 39, lock applied to entire group), the lock preventing a disparate requestor from accessing the one or more messages linked by the unique group identifier (col 4, lines 53-54; col 7, line 39, lock applied to entire group and no other thread or application may access the message);

providing exclusive serial access to the messages linked by the unique group identifier (col 4, lines 53-54; col 7, line 39, exclusive lock applied to entire group and no other thread or application may access the message) such that only one service can process linked message at any time (col 4, lines 53-54; col 7, line 39, lock applied to entire group and no other thread or application may access the message) and such that the messages are processed in order (fig 7 and 8, col 4, lines 57-60);

while providing exclusive serial access to the messages linked by the unique group identifier (col 4, lines 53-54; col 7, line 39, exclusive lock applied to entire group and no other thread or application may access the message);

when a reader has finished processing the linked messages, receiving a notification from the reader to release the lock on the group (col 4, lines 53-56, broadly

interpreting unlocked by the application is releasing lock; see abstract also); and

releasing the lock (col 4, lines 53-56, broadly interpreting unlocked by the application is

releasing lock).

. Hickson did not specifically disclose the group is conversation group, providing

concurrent processing of one or more messages not linked by the unique group

identifier. However, Klein discloses group can be any type including conversation group

(fig 4, para [0071]), providing concurrent processing of one or more messages not

linked by the unique group identifier (para [0076]). It would have been obvious to one of

ordinary skill in the art at the time of the invention was made to combine the teachings

of Klein and Hickson. All the claimed elements (concurrent processing of the messages,

relationship/linking messages between parent [group] and child [message]) were known

in the database art and one skilled in the art would have combined the elements as

claimed by known methods with no change in their respective functions and the

combination would have yielded predictable results to one of ordinary skill in the art at

the time of the invention.

7.   As per claim 18, the claim is rejected for the same reasons as claim 17, above. In

addition, Klein discloses receiving one or more related messages associating the

related messages with the conversation group (para [0076], instance identifier and

associated messages); and the related messages to mitigate out-of-order processing

(para [0076] broadly interpreting out-of-order as inefficiencies).

8.   As per claim 19, the claim is rejected for the same reasons as claim 17, above. In

addition, Klein discloses automatically updating the conversation group (para [0076])

with incoming related messages (para[0069]).

9.   As per claim 20, the claim is rejected for the same reasons as claim 17, above. In

addition, Hickson discloses utilizing a group identifier to lock the group (col 7, line 39,

lock applied to entire group).

10.   As per claim 21, the claim is rejected for the same reasons as claim 17, above. In

addition, Hickson discloses storing the message in-order (col 4, lines 57-60)

11.   As per claim 22, Hickson discloses receives a request for a message (101,102,

fig 8, col 7, lines 43-53, find grouped message);

        determining from information associated with the message that message belongs

to a group(fig 7, col 5, lines 24-26);

        associating the messages and other related messages with a group identified

by a unique group identifier (fig 7, col 5, lines 24-26);

        locking the group via unique group identifier (col 7, line 39, lock applied to entire

group), the lock preventing a disparate requestor from accessing the one or more

messages linked by the unique group identifier (col 4, lines 53-54; col 7, line 39, lock

applied to entire group and no other thread or application may access the message);

providing exclusive serial access to one or more messages of the group

identified by the unique group identifier to the requestor (col 4, lines 53-54; col 7, line

39, exclusive lock applied to entire group and no other thread or application may access

the message) such that the messages are processed in order (fig 7 and 8, col 4, lines

57-60);

while providing exclusive serial access to the one or more messages of the

conversation group (col 4, lines 53-54; col 7, line 39, exclusive lock applied to entire

group and no other thread or application may access the message), when a requestor

has finished processing the linked messages, receiving a notification from the requestor

to release the lock on the conversation group (col 4, lines 53-56, broadly interpreting

unlocked by the application is releasing lock; see abstract also); and releasing the lock

(col 4, lines 53-56, broadly interpreting unlocked by the application is releasing lock).

. Hickson did not specifically disclose the group is conversation group, providing

concurrent processing of one or more messages not linked by the unique group

identifier. However, Klein discloses group can be any type including conversation group

(fig 4, para [0071]), providing concurrent processing of one or more messages not

linked by the unique group identifier (para [0076]). It would have been obvious to one of

ordinary skill in the art at the time of the invention was made to combine the teachings

of Klein and Hickson. All the claimed elements (concurrent processing of the messages,

relationship/linking messages between parent [group] and child [message]) were known

in the database art and one skilled in the art would have combined the elements as

claimed by known methods with no change in their respective functions and the

combination would have yielded predictable results to one of ordinary skill in the art at
the time of the invention.

12.   As per claim 23, claim is rejected for the same reasons as claims 22, above. In
addition, Hickson discloses utilizing message identifiers   to determine whether
messages are related (fig 7, col 5, lines 24-26).

13.   As per claim 24, claim is rejected for the same reasons as claim 22, above. In
addition, Hickson discloses receiving the conversation group identifiers to associate with
the group (fig 7, col 5, lines 24-26).

14.   As per claim 25, claim is rejected for the same reasons as claim 22, above. In
addition, Klein discloses dynamically updating conversation group with incoming related
messages (para [0069]).

15.   As per claim 29, claim is rejected for the same reasons as claim 17, above. In
addition, Klein discloses a computer readable medium storing computer executable
instructions which when executed upon one or more computer processors facilitate
processing by causing the processors to perform the method of claim 17 (para [0090]).

Response to Arguments

16.   Applicant's arguments with respect to claims 17 and 22 have been considered

but are moot in view of the new ground(s) of rejection.

17.   In response to applicants argument regarding U.S.C. 101 rejection to the claim

29. The United States Patent and Trademark Office (USPTO) is obliged to give claims

their broadest reasonable interpretation consistent with the specification during

proceedings before the USPTO. *See In re Zletz*, 893 F.2d 319 (Fed. Cir. 1989) (during

patent examination the pending claims must be interpreted as broadly as their terms

reasonably allow). The broadest reasonable interpretation of a claim drawn to a

computer readable medium (also called machine readable medium and other such

variations) typically covers forms of non-transitory tangible media and transitory

propagating signals *per se* in view of the ordinary and customary meaning of computer

readable media, particularly when the specification is silent. *See* MPEP 2111.01.

When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim

must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. *See*

In re Nuijten, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not

directed to statutory subject matter) and *Interim Examination Instructions for Evaluating*

Subject Matter Eligibility Under 35 U.S.C. § 101, Aug. 24, 2009; p. 2.

        The USPTO recognizes that applicants may have claims directed to computer

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35 U.S.C. § 101 as covering both non-statutory subject matter and statutory subject

matter. In an effort to assist the patent community in overcoming a rejection or potential

rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests the following approach. A claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation "non-transitory" to the claim. *Cf. Animals – Patentability*, 1077 *Off. Gaz. Pat. Office* 24 (April 21, 1987) (suggesting that applicants add the limitation "non-human" to a claim covering a multi-cellular organism to avoid a rejection under 35 U.S.C. § 101). Such an **amendment would typically not raise the issue of new matter**, even when the specification is silent because the **broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals *per se*.** The limited situations in which such an amendment could raise issues of new matter occur, for example, when the specification does not support a non-transitory embodiment because a signal *per se* is the only viable embodiment such that the amended claim is impermissibly broadened beyond the supporting disclosure. *See, e.g., Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998).

Conclusion

18.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD A. SIDDIQI whose telephone number is (571)272-3976. The examiner can normally be reached on Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohammad A Siddiqi/
Examiner, Art Unit 2493